P2Z GPU Version Performance on Summit

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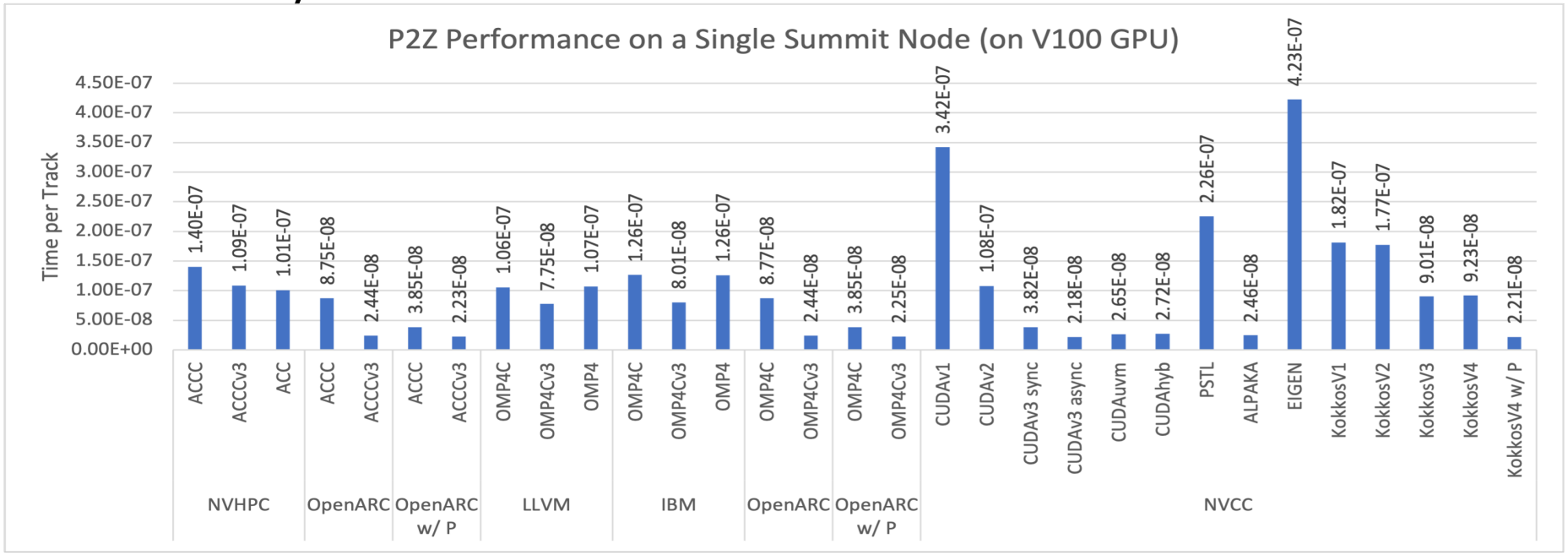
P2Z GPU Version Performance on a Summit Node (NITER = 10)



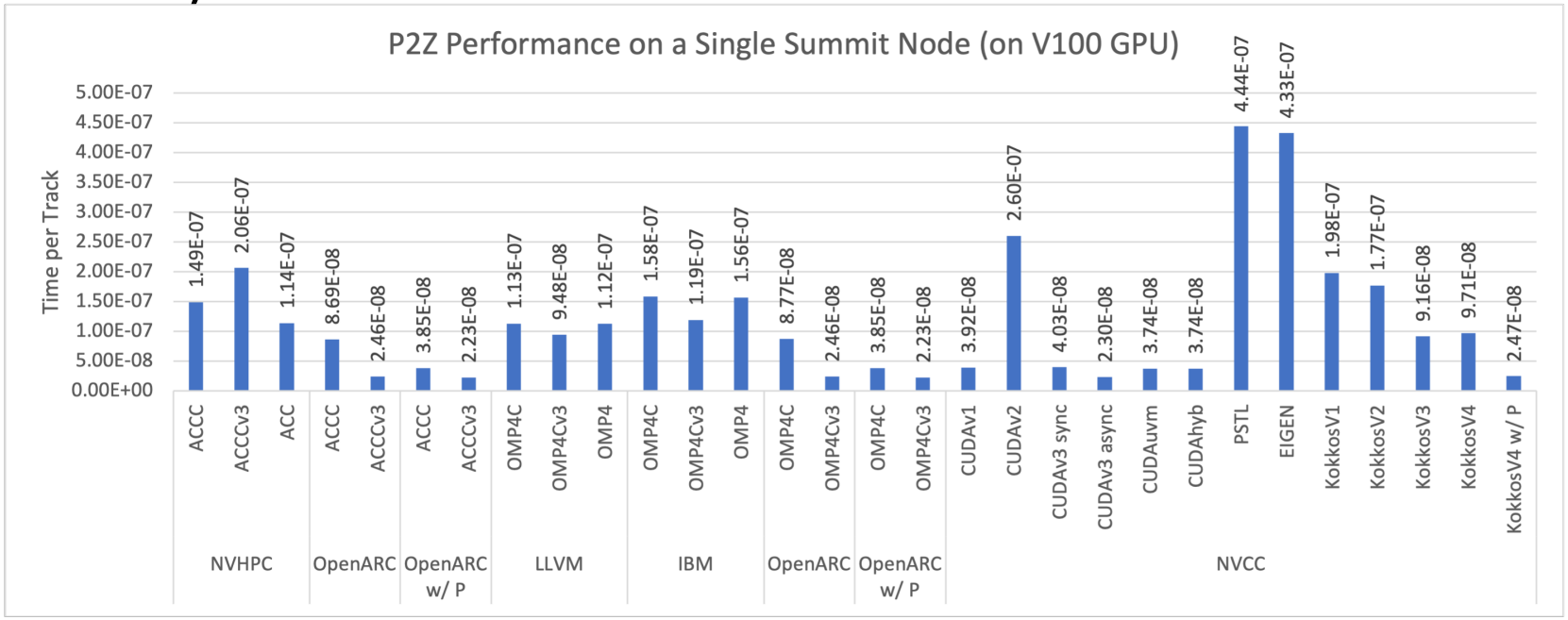
- **ACCC**: OpenACC C sync version
- **ACCCv3**: OpenACC C async version
- **ACC**: OpenACC C++ sync version
- **OMP4C**: OpenMP4 C sync version
- **OMP4Cv3**: OpenMP4 C async version
- **OMP4**: OpenMP4 C++ sync version

- **CUDAv1**: CUDA unified memory version (no shared memory)
- **CUDAv2**: CUDA sync version (no shared memory)
- **CUDAv3 sync**: CUDA V3 sync version
- **CUDAv3 async**: CUDA V3 async version
- **CUDAuvm**: CUDA unified memory version
- **CUDAhyb**: hybrid CUDA version with UVM

- **PSTL**: C++ parallel STL
- **ALPAKA**:
- **EIGEN**:
- **KokkosV1**: CUDA unified memory
- **KokkosV2**: same patterns as KokkosV1 but with explicit memory transfers
- **KokkosV3**: same patterns as CUDAv3 sync but w/o host memory prepinning
- **KokkosV4**: same patterns as CUDAv3 async version

Compilers: NVHPC (V22.5), OpenARC (V0.73), LLVM (V15.0), IBM (V16.1.1), and NVCC (V11.0) (***w/ P* :** with host memory prepinning) (All CUDA versions are w/ P)

P2Z GPU Version Performance on a Summit Node (NITER = 1)



- **ACCC**: OpenACC C sync version
- **ACCCv3**: OpenACC C async version
- **ACC**: OpenACC C++ sync version
- **OMP4C**: OpenMP4 C sync version
- **OMP4Cv3**: OpenMP4 C async version
- **OMP4**: OpenMP4 C++ sync version
- **CUDAv1**: CUDA unified memory version (shared memory: same as CUDAv3)
- **CUDAv2**: CUDA sync version (no shared memory)
- **CUDAv3 sync**: CUDA V3 sync version
- **CUDAv3 async**: CUDA V3 async version
- **CUDAuvm**: CUDA unified memory version
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